THE STUDY OF LARGE FIRES

National Fire Coordination Study

U.S. DEPARTMENT OF AGRICULTURE/ FOREST SERVICE/ DIVISION OF FIRE CONTROL

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Background for the Fire Study

On May 28, 1964, the Forest Service agreed to conduct a National Fire Coordination Study and prepare recommendations to help the Office of Civil Defense implement plans and programs to cope with fires resulting from an enemy attack or other major disaster. A task force of 4 people, situated in the Division of Fire Control, Washington Office, are leading this work. Their mission includes summarizing pertinent fire research, examining the workings and capabilities of our existing fire services, and defining the magnitude of emergencies we could possibly experience. Then, with the help of informed people in the urban and rural fire field, they will recommend operational courses of action and define problems needing more study.

Why Study Large Fires?

Obviously fire services throughout the United States have great fire prevention and suppression strengths. Some examples are; procedures for helping one another, ways of organizing, suppression techniques, special equipment, communication systems, procedures for dispatching equipment and men, and fire prevention programs. Given all these strengths and others, how effectively can our fire services join together and cope with the fires that might result from a serious nuclear attack? The questions pertinent to the National Fire Coordination Study are; (1) What are the strengths and the weakness of our fire forces, as presently arranged, to cope with a fire problem of this magnitude?, and (2) How can we, the fire services more effectively use these strengths, shore up the weaknesses and join together to control the fires?

One way we can examine our effectiveness is to study what actually happens on large fires. We can learn from large fires that have occurred in the past and from any that might occur currently. These past and current fires do not present as severe a fire problem as would a nuclear attack, but here we can examine reality -- see how our mutual aid works, how command assignments are made, how our equipment was developed, how people were evacuated, how the fires spread, what tactics worked best, etc. and then we can relate what we learn to the more serious nuclear attack fires and their accompanying fallout problems.

Here's How We'll Study Fires

Fires to be studied will be selected by the National Fire Coordination Study Task Force. A cross section of past fires will be selected. Current fires will be selected as they occur. One or two analysts will be assigned to study each fire. If urban and rural areas were burned in the fire, one analyst will be qualified in rural fire suppression and one in urban fire suppression.

The analyst will study records pertinent to the fire being studied and, in addition; (1) get information from key people who suppressed the fire, (2) visit the site of the fire if significant additional data can be obtained, and (3) assemble and study pictures, maps, and recordings made about the fire.

There are 19 subject areas that the fire analyst will gather information about. These are:

1. Mutual Aid Arrangements - Pre-disaster and during disaster.

2. Multi-Organization Command Assignments and Organization Structure - Pre-disaster and during disaster.

3. Suppression and Rescue Resources Inventory, Dispatching and Locator System - Pre-disaster and during disaster.

4. Communication System.

5. Fire Problems That, If Solved, Would Strengthen Action.

6. Protection of Key Buildings and Structures - Relate this to shelter fire safety.

7. Cost-Benefit Factors in Strategic Decisions - Values Sacrificed and Values Gained.

8. Strategic Re-Deployment of Forces to Protect Key Areas.

9. Emergency Evacuation of People.

10. System and Basis for Estimating Control Force Needs - Relate to timing of action.

11. Control Objectives.

12. Tactics and Equipment.

13. Pre-Disaster Planning and Prevention Measures.

14. Training of Overhead and Suppression Forces - Pre-disaster and during disaster. Training planned, training done, methods and equipment used.

15. Fuel Conditions.

16. Logistics and Action Timing. Immediate Action, First Hour Action, First Day Action - Relate to fallout probability.

17. Fatigue Factors.

18. Weather Conditions.

19. Additional Unforeseen Factors That Will Add to the Quality of Section 4, Project Order No. OCD-PS-64-229.

Here's How We'll Use What We Learn

Each fire study's end product will be a report. In the report the analyst will analyze the data he gathered from the study, describe findings of fact, conclusions or assumptions pertinent to the National Fire Coordination Study, and make recommendations. These fire study reports will be used, along with other important sources of information, as a basis for decisions about the scope, size, and direction of the Civil Defense program in fire.